Forum Alternatives
(May 30, 2006)

Background and Context

On November 24, 1998, the County Board of Supervisors has adopted the Beach-Stone Lakes Flood Control Plan that outlined the County's policies for reducing flooding in the BSL area. The County recognizes that flooding in the North Delta is caused by impacts from several jurisdictions. It is therefore beyond the scope and wherewithal of any single local entity to provide a regional flood control solution, particularly considering the significant economic and environmental considerations that are also involved. The County believes that this regional flooding problem can only be solved through a regional project that is spearheaded by state and federal agencies, with cooperation of local agencies. The County has actively participated in CALFED's search for solutions in the North Delta, and supports a regional project that attenuates peak flood flows or increases flood flow conveyance in the Mokelumne River.

From engineering studies and the forum discussions, the County will prepare a report that describes each of the alternatives, summarizes the approach and assumptions for the evaluations, and presents the key findings of this effort.

Alternatives being evaluated:

1) Alternative 11-F - The preferred local project to reduce flooding in the BSL area is Alternative 11F (see Figure 1). This alternative was selected for implementation by the County Board of Supervisors in November 1998 from many which were studied by County staff and consultants. This project would increase downstream flooding elevations, and the County has assumed that implementing Alternative 11F is dependent upon construction of a regional conveyance project. However, estimates of downstream impacts will be revised using the latest hydraulic modeling resources, and those impacts will be presented for discussion.

2) Ring Levee. Elevation. and Relocation - This alternative would include a local levee around the community of Point Pleasant east of Interstate 5, and structure elevation and relocation elsewhere (see Figure 1).

3) Cosumnes River Drv Dam - The Latrobe Dry Dam alternative (see Figure 2) consists of a dry dam on the Cosumnes River between the County Line and Latrobe Road. The Corps of Engineers previously evaluated this site for a multi-purpose reservoir in 1990. For this study, the dam is intended solely for flood control purposes. The engineering consultant is completing hydrologic and hydraulic analyses of this alternative and will estimate construction and other implementation costs.

4) RD 813 Detention Alternative - The Reclamation District 813 Storage Alternative (see Figure 1), includes all components of Sacramento County Alternative 11-F and adds flood storage in Reclamation District 813 (RD 813) to offset the potential downstream hydraulic impacts. In addition, the alternative may include a levee along the east side of Interstate 5 between Hood-Franklin Road and the Laguna-Stone Lakes.

Alternatives previously suggested, but determined to not be feasible:

The following alternatives are not being studied because an initial appraisal concluded that they either could not substantially reduce flooding risk in the Study Area, or they could not be implemented under the authorities of the County.

1) Pumping along Hood-Franklin Road - Pumping flows from the north to south side of this east-west roadway will have negligible effect on flood risk in the area, and would only cause a small redistribution of the risk.

2) Upgrade RD 1002 pumps - Pumping would be used to reduce flooding risk only in the event ofa failure ofRD 1002's levees. Under those conditions, the volume which could be pumped is a small fraction of the volume which would pass through a levee break.

3) Use Glanville Tract as a detention basin - The failure of Glanville Tract levees (included the UPRR grade) contributed to the 1986 and 1997 floods in Point Pleasant. Therefore, the conditions which pose a risk of flooding are when the detention volume would not be available. In addition, use of the area for detention would require Interstate 5 to be flooded.

4) Mokelumne Dam system reoperation - The flood flows of the Mokelumne River are very effectively regulated by flood control operation of Camanche Reservoir. With peak flood releases limited to approximately 5,000 cfs, the Mokelumne River does not represent a significant contribution to flood hazard in the Study Area.

5) Dredge the Mokelumne River forks and set back levees - These alternatives are being studied in the CALFED North Delta effort, and cannot be implemented under the authorities of the County.

Figure 2
Cosumnes River Dry Dam